

The AMD Athlon™ XP Processor

Extreme Performance for Windows® XP

- ❑ **The Ultimate Digital Media Experience in an x86 Platform**
- ❑ **Tailored for Microsoft® Windows® XP**
- ❑ **Featuring QuantiSpeed™ Architecture for Rapid Execution of Applications**
- ❑ **Tomorrow's Technology Today**
- ❑ **The Power of a Reliable Partner**

AMD Athlon™ XP Processor Overview

The AMD Athlon™ XP processor with QuantiSpeed™ architecture powers the next generation in computing platforms, delivering extra performance for cutting-edge applications and an extraordinary computing experience. The AMD Athlon XP processor is the latest member of the AMD Athlon family of processors designed to meet the computation-intensive requirements of cutting-edge software applications running on high-performance desktop systems.

AMD delivers tremendous performance by increasing the amount of work done per clock cycle and improving the operating frequency at the same time. The end result is a processor design that produces a high volume of work done per cycle and high operating frequencies—an optimum combination for compelling application performance.

The Ultimate Digital Media Experience in an x86 Platform

The AMD Athlon XP processor offers fast results when working with digital media like audio, video, and image files. The AMD Athlon XP processor provides for outstanding near real-time voice, video, and CAD/CAM as a result of features like larger cache memory, 3DNow!™ Professional technology, and the innovative QuantiSpeed™ architecture which includes the industry's most powerful fully-pipelined x86 floating point engine.

The AMD Athlon XP processor brings digital entertainment like games and DVDs to life with rich, smooth graphics and true to life sound. The processor enables a more life-like audio experience with special surround sound enhancing features. The AMD Athlon XP processor takes advantage of connected digital devices and their content by delivering realistic photos, smooth videos, and rich sound. The combination of the Windows® XP operating system's features and the exceptional capabilities of the AMD Athlon XP processor provide a phenomenal Internet experience with smoother streaming audio and video.

Tailored for Microsoft® Windows® XP

The AMD Athlon XP processor offers compelling performance for running Microsoft Windows XP, as well as outstanding performance on previous versions of Windows. The raw power and robust features of the AMD Athlon XP processor enable users to make the most of multitasking and user switching capabilities offered in Windows XP. Microsoft optimized the DirectX 8.0 interface for Windows XP specifically for the AMD Athlon XP processor. The AMD Athlon XP processor's innovative QuantiSpeed architecture helps propel Windows XP application performance to a new level. To unleash the rich features found in Windows XP, AMD and Microsoft worked together

to optimize applications like Media Encoder 8.0 for AMD's 3DNow! Professional technology.

AMD Athlon processors were used in the design and development of the Windows XP operating system, which helps to ensure that systems based on AMD processors offer excellent OS compatibility. AMD and Microsoft's strong working relationship dates back over a decade to the first version of Windows. Over the years, AMD processors have powered some of the most reliable PC systems for Windows applications, increasing productivity and enjoyment for end-users.

Featuring QuantiSpeed™ Architecture for Rapid Execution of Applications

QuantiSpeed architecture, the latest technological enhancement to the award-winning AMD Athlon processor core, provides for extra performance in the cutting-edge features users need most. At the heart of QuantiSpeed architecture is a nine-issue, superscalar, fully-pipelined core. This provides more pathways to feed application instructions into the execution engines of the core, simply allowing the processor to complete more work in a given clock cycle. Additional features of QuantiSpeed architecture include a superscalar, fully-pipelined floating point engine, hardware data prefetch, and exclusive, speculative Translation Look-aside Buffers (TLBs). Combined, these features help boost overall productivity and allow a system to boot and load applications quickly. In the end, users will enjoy an effortless computing experience.

Software applications and Internet plug-ins run lightning-fast because they are optimized to take advantage of innovative QuantiSpeed architecture and 3DNow! Professional technology, found exclusively in the AMD Athlon XP processor. AMD has generated benchmark data for the performance results of the AMD Athlon XP processors that Andersen, a global leader in professional services, has independently audited. Visit the AMD Web site at www.amd.com to view the data and audit results.

Tomorrow's Technology Today

The AMD Athlon XP processor's advanced architectural features help ensure outstanding levels of performance. These features include:

- QuantiSpeed™ Architecture
- 384K Total High-Performance, Full-Speed Cache
- Advanced 266MHz Front-Side Bus with ECC (Error Correcting Code) Support
- 3DNow!™ Professional Technology (72 instructions, full SSE compatibility)
- Support for Double Data Rate (DDR) Memory
- Established Socket A Infrastructure

The Power of a Reliable Partner

AMD worked side-by-side with Microsoft to achieve compatibility between AMD processors and the Windows XP operating system. The result provides a more stable system with reliable application performance and less downtime. The AMD Athlon XP processor is compatible with more than 60,000 software applications, including the latest 3DNow! Professional and MMX™ technology-enhanced software. AMD has worked with industry-leading hardware and software companies to achieve comprehensive compatibility. In addition, AMD also conducts its own rigorous processor validation to help assure the integrity and ease of use for which AMD processors are renowned.

Founded in 1969, AMD has shipped more than 175 million PC processors worldwide. AMD processors undergo extensive testing to confirm compatibility with Microsoft Windows XP, Windows 98, Windows Me, Windows NT®, Windows 2000, as well as Linux and other operating systems.

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